CEASEFIRE™ FLAME PREVENTATIVE FIRE-RETARDANT PRODUCT(S)

CHARACTERISTICS
• foam char swells from 1 to 1.5 inches
• activates 300°C
• provides efficient flame barrier
• stops fire, spread of flame and smoke
• very low toxicity (MSC 41)
• ASTM E84 Flame Spread Test Rating on epoxy = 5
• ASTM E84 Smoke Density. Test Rating on epoxy = 5
• Pittsburgh Protocol >15 minutes
• Intumescent powder can be added to many types of coatings and compounds.
• At 10 mils thick, certified by DNV (Det Norske Veritas) and ABS (American Bureau of Shipping) after passing strict tests of IMO (International Marine Organization).

DEFINITION
• New and revolutionary, flame retardant/ intumescent agent which surpasses all fire retardant intumescent technology.
• Produced as a powder, it can be added to coatings, thermostet coatings and foams, potting compounds, fiberglass reinforced structures, electronic laminates, etc. Proven successful when added to epoxy, acrylic, vinyl acetate, urethane, phenolic and PVC resin systems, nylon, plastics, and textile polymers.
• When blended into a coating or other compound system, it will react to heat and flame by foaming and forming a thick high-yield char barrier. Coatings as thin as 5 mils thick (5/1000 of an inch) will produce a char of up to 1.5 inches with good structural integrity. Char barrier will not burn and will prevent further flame spread while insulating and protecting the substrate from heat damage.
• The protective char barrier can withstand direct flame from a propane torch (approximately 1800°C or 3275°F) for many hours with some resin systems.
• The new fire-retardant coatings are based on proprietary non-halogenated phosphate technology.

PRODUCT INFORMATION AND ATTRIBUTES
• Insoluble in water; will not leach out over time.
• When added to the final coating or compound, passes and surpasses all fire standard tests.
• The fire retardant powder is currently incorporated in the following stand-alone coatings:
  • A unique, two-component epoxy coating, white in color and easily tinted. Contains no VOC’s. Easily reduced (thinned) by the addition of solvents, anti-settling agents may be added. Excellent adhesion, scratch resistance, wearability and flexibility.
  • An indoor-only, two-part clear epoxy with the same properties. Not recommended for outdoor use, it will cloud over after prolonged exposure to UV light;
  • A one-component latex coating with very low smoke generation during char formation. Recommended for coating wood, composites, plastics, and metals. Viscosity is easily reduced (thinned) by adding water. Pigments and anti-settling agents may also be incorporated; and
  • A unique two-part phenolic intumescent coating with extremely low smoke emissions. Easily reduced (thinned) with the addition of solvents.
  • CEASEFIRE™ additive has been incorporated in DURABAK™ (A one-part, moisture cured, totally flexible, extremely durable, repairable, slip-resistant, waterproof polyurethane protective coating).
• Compared to other flame retardant coatings, the cost is minimal, because comparatively much less powder has to be added to the coating or compound for it to be totally effective. Also, the application is much easier, less costly, and much more effective than other flame retardant coatings.
• Some other flame retardant coatings (especially indoor coatings) contain sugars or starches in order to produce their flame retardant properties. The sugars and starches attract bacteria, fungi and mold, which limits their use to indoor applications. COTE-L’s CEASEFIRE™ flame preventative product, containing no such organic material, can be effectively used for indoor and outdoor applications.
• Once the char has formed, and the fire is out, the char can be scraped off the surface and the undamaged substrate can be refurbished.
• Registered world-wide patents.
• The shelf life of the powder is indefinite. When incorporated into a coating or compound, the shelf-life depends upon that of the coating or compound.
• The char activation temperature is 300°C.
• The powder may be added to other coatings and compounds, but specific lab testing must first be done to determine the proper amount and version to be added to produce the desired results.